

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/31199

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 7/212, 3/04; H04L 27/06; H04N 5/76; H04Q 7/20
US CL : 455/456; 375/234, 344; 386/83; 370/337

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 455/456; 375/234, 344; 386/83; 370/337

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,206,886 A (BINGHAM) 27 April 1993 see fig.2 and col.6, lines 35-67 and col.9, lines 23-37	1-10
Y	US 6,266,534 B1 (RAITH et al) 24 July 2001 see figs. 5-6 and col.7, lines 50-67 and col.8, lines 10-35	1-10
Y	US 4,800,573 A (CUPO) 24 January 1989 see fig.1 and column 3, lines 42-67 and col.4, lines 1-40	1-10
Y	US 5,467,197 A (HOFF) 14 November 1995 see fig.4 and column 8, lines 1-67	1-10

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search

06 January 2004 (06.01.2004)

Date of mailing of the international search report

05 FEB 2004

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